AMENDMENTS TO THE CLAIMS

The following represents a complete listing of the claims submitted in the present application including the present status of each and any amendments being made by this paper. It is intended to replace all prior versions of the claims in this application. Any claims canceled in this application are canceled without prejudice and applicants specifically reserve the right to pursue such claims in continuing or divisional applications in the future.

By this paper claims 54-56, 58-70, 76-77 and 89-106 have been canceled and claims 53, 57, 71 and 81-86 have been amended.

Listing of the Claims

1-52(canceled).

53(currently amended). A method of suppressing the expression of a selected gene in a eukaryotic cell, the method comprising ~~introduing~~ introducing into the cell (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene, which site is present in a eukaryotic genome, and a chromatin inactivation portion, or (b) a polynucleotide encoding said polypeptide, wherein the chromatin inactivation portion of the polypeptide is selected from all or a N-CoR- or SMRT-binding part of PLZF ~~or~~ and wherein the nucleic acid binding portion of

the polypeptide is selected from all or a DNA binding part of a nuclear receptor DNA binding protein.

54-56(canceled).

57(currently amended). A method according to claim 53 ~~or 54~~ wherein ~~when the nucleic acid-binding portion is selected from all or a DNA-binding part of a nuclear receptor DNA binding protein~~ the chromatin inactivation portion facilitates histone deacetylation.

58-70(canceled).

71(currently amended). A method according to claim ~~55~~ 53 wherein ~~when the chromatin inactivation portion is selected from all or a N-CoR- or SMRT-binding part of PLZF~~ the DNA binding portion is selected from all or a DNA-binding part of a zinc-finger DNA binding protein or all or a DNA-binding part of a helix-turn-helix DNA binding protein.

72(previously presented). A method according to claim 71 wherein the DNA binding portion is selected from all or a DNA-binding part selected from an animal or plant DNA binding protein.

73(previously presented). A method according to claim 71 wherein the DNA binding portion is selected from all or a DNA-binding part selected from a bacterial or yeast DNA binding protein engineered to bind plant or animal genome.

74(previously presented). A method according to claim 53 wherein the DNA binding portion is selected from all or a DNA binding part of a steroid hormone receptor protein.

75(previously presented). A method according to claim 74 wherein the steroid hormone receptor protein is selected from all or a DNA-binding portion of estrogen receptor (ER) or all or a DNA-binding portion of androgen receptor (AR).

76-77(canceled).

78(previously presented). A method according to claim 53 wherein the nucleic acid binding portion and the chromatin inactivation portion are fused.

79(previously presented). A method according to claim 53 wherein the eukaryotic cell is selected from an animal cell and is contained within an animal or a plant cell and is contained within a plant.

80(previously presented). A method according to claim 53 wherein the expression of a selected gene in a human is suppressed.

81(currently amended). A method according to claim 53 wherein the expression of a plurality of selected ~~gene~~ genes is suppressed.

82(currently amended). ~~Use in the manufacture of~~ A method of manufacturing an agent for suppressing the expression of ~~the~~

a selected gene in a eukaryotic cell, including a step of using a gene in the preparation of said agent wherein said gene is selected from (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene, which site is present in a eukaryotic genome, and a chromatin inactivation portion, or (b) a polynucleotide encoding a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with a selected gene, which site is present in a plant or animal genome, and a chromatin inactivation portion ~~selected from all or a N-CoR- or SMRT-binding part of PLZF or wherein the nucleic acid binding portion is selected from all or a DNA binding part of a nuclear receptor DNA binding protein~~, wherein the nucleic acid binding portion is a DNA binding part of a nuclear receptor DNA binding protein and the chromatin inactivation portion is all or a N-CoR or SMRT-binding part of PLZF.

83(currently amended). ~~Use~~ A method according to claim 82 wherein the agent is a medicament for suppressing the expression of a selected gene in an animal.

84(previously presented). A method of treating a patient in need of suppression of the expression of a selected gene, the method comprising a step selected from

(a) administering to the patient an effective amount of a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene and a chromatin inactivation portion; and

(b) administering to the patient an effective amount of a polynucleotide encoding a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene and a chromatin inactivation portion,

wherein the nucleic acid binding portion is a DNA binding part of a nuclear receptor DNA binding protein and the chromatin inactivation portion is all or a N-CoR or SMRT-binding part of PLZF.

85(currently amended). ~~Use in the manufacture of~~ A method of manufacturing a medicament for suppressing the expression of ~~the~~ a selected gene in a eukaryotic cell, said method including a step of using a gene in the preparation of said medicament wherein said gene is selected from (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene which site is present in a eukaryotic genome and a chromatin inactivation portion, or (b) a polynucleotide encoding a polypeptide comprising a nucleic acid

binding portion which binds to a site at or associated with a selected gene which site is present in a plant or animal genome and a chromatin inactivation portion ~~selected from all or a N-CoR- or SMRT-binding part of PLZF or wherein the nucleic acid binding portion is selected from all or a DNA binding part of a nuclear receptor DNA binding protein~~ wherein the nucleic acid binding portion is a DNA binding part of a nuclear receptor DNA binding protein and the chromatin inactivation portion is all or a N-CoR or SMRT-binding part of PLZF.

86(currently amended). A composition selected from pharmaceutical compositions and compositions used in medicine selected from (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene which site is present in a eukaryotic genome and a chromatin inactivation portion, or (b) a polynucleotide encoding a polypeptide, wherein the chromatin inactivation portion is selected from all or a N-CoR- or SMRT-binding part of PLZF ~~or~~ and wherein the nucleic acid binding portion is selected from all or a DNA binding part of a nuclear receptor DNA binding protein.

87(previously presented). A composition according to claim 86 including a pharmaceutically acceptable carrier.

88(previously presented). A composition according to claim 86 wherein the composition is a polypeptide.

89-106(canceled).